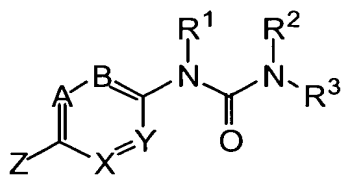


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This listing of claims will replace all prior versions, and listings, of claims in the application (note that amendments are highlighted in **bold**):

**Listing of Claims:**

1. (currently amended) A compound of Formula I:



**a prodrug thereof**, or a pharmaceutically acceptable salt and/or hydrate of said compound ~~or of said prodrug~~, or where applicable, a geometric or optical isomer or racemic mixture thereof,

wherein

~~=A-B= is =C(R<sup>4</sup>)-C(R<sup>5</sup>)= and -X=Y- is -C(R<sup>6</sup>)=N-, -N=C(R<sup>7</sup>)-, -N=N- or -S-, or~~

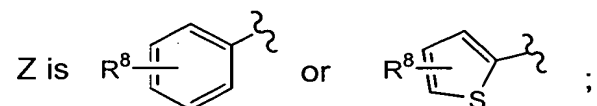
=A-B= is =N-C(R<sup>5</sup>)= and -X=Y- is -N=C(R<sup>7</sup>)-, ~~-C(R<sup>6</sup>)=N-, -S- or -O-, or~~

=A-B= is =C(R<sup>4</sup>)-N= and -X=Y- is -C(R<sup>6</sup>)=N-, ~~-S- or -O-, or~~

~~=A-B= is =N-N= and -X=Y- is -S- or -O-, or~~

~~=A-B= is =C(R<sup>4</sup>)= and -X=Y- is -S-N=, -N(R<sup>10</sup>)-N=, or~~

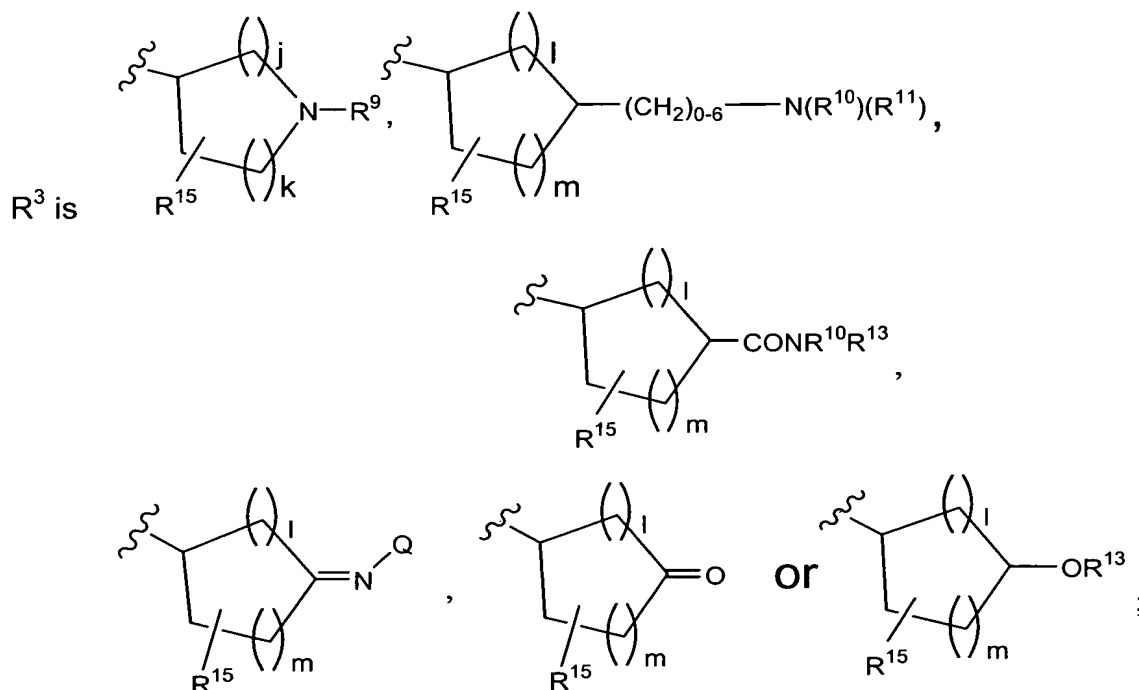
~~=A-B= is -C(R<sup>4</sup>)= and -X=Y- is =N-S-, or =N-N(R<sup>10</sup>)=;~~



R<sup>1</sup> is H or -(C<sub>1</sub>-C<sub>6</sub>)alkyl;

R<sup>2</sup> is H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl or -(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl;

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Q is  $-OR^{13}$ , or  $-NR^{13}R^{14}$ ;

j is 1 or 2;

k is 0, 1 or 2;

l is 0, 1 or 2;

m is 0, 1 or 2;

$R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  may be the same or different, and are independently selected from the group consisting of H, -OH, halogen, polyhaloalkyl,  $-(C_1-C_6)$ alkyl,  $-(C_3-C_7)$ cycloalkyl,  $-(C_1-C_6)$ alkyl $-(C_3-C_7)$ cycloalkyl, -CN,  $NR^{10}R^{11}$ ,  $NR^{13}R^{14}$ ,  $-O(C_1-C_6)$ alkyl,  $-O(C_3-C_7)$ cycloalkyl,  $-O(C_1-C_6)$ alkyl $-(C_3-C_7)$ cycloalkyl,  $-S(C_1-C_6)$ alkyl,  $-S(C_3-C_7)$ cycloalkyl and  $-S(C_1-C_6)$ alkyl $-(C_3-C_7)$ cycloalkyl;

$R^8$  is 1 to 3 substituents, which may be the same or different, and are independently selected from the group consisting of H, halogen, -OH, polyhaloalkyl, polyhaloalkoxy, -CN,  $-NO_2$ ,  $-(C_1-C_6)$ alkyl,  $-(C_3-$

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C<sub>7</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, NR<sup>10</sup>R<sup>11</sup>, NR<sup>13</sup>R<sup>14</sup>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl and -CONR<sup>13</sup>R<sup>14</sup>;

R<sup>9</sup> is -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)polyhaloalkyl, -SO<sub>2</sub>[hydroxy(C<sub>2</sub>-C<sub>6</sub>)alkyl], -SO<sub>2</sub>[amino(C<sub>2</sub>-C<sub>6</sub>)alkyl], -SO<sub>2</sub>[alkoxy(C<sub>2</sub>-C<sub>6</sub>)alkyl], -SO<sub>2</sub>[alkylamino(C<sub>2</sub>-C<sub>6</sub>)alkyl], -SO<sub>2</sub>[dialkylamino(C<sub>2</sub>-C<sub>6</sub>)alkyl], -SO<sub>2</sub>(aryl), -SO<sub>2</sub>(heteroaryl), -SO<sub>2</sub>[aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl], -SO<sub>2</sub>NR<sup>13</sup>R<sup>14</sup>, -CO(C<sub>1</sub>-C<sub>6</sub>)alkyl, -CO(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -CO(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, CO(C<sub>1</sub>-C<sub>6</sub>)polyhaloalkyl, -C(O)aryl, -C(O)heteroaryl, -CONR<sup>13</sup>R<sup>14</sup>, -C(S)NR<sup>13</sup>R<sup>14</sup>, aryl, heteroaryl, -(CH<sub>2</sub>)CONR<sup>13</sup>R<sup>14</sup>, -C(=NCN)alkylthio, -C(=NCN)NR<sup>13</sup>R<sup>14</sup>, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkylaryl, -(C<sub>1</sub>-C<sub>6</sub>)alkylheteroaryl or -COOR<sup>12</sup>;

R<sup>10</sup> is H or alkyl;

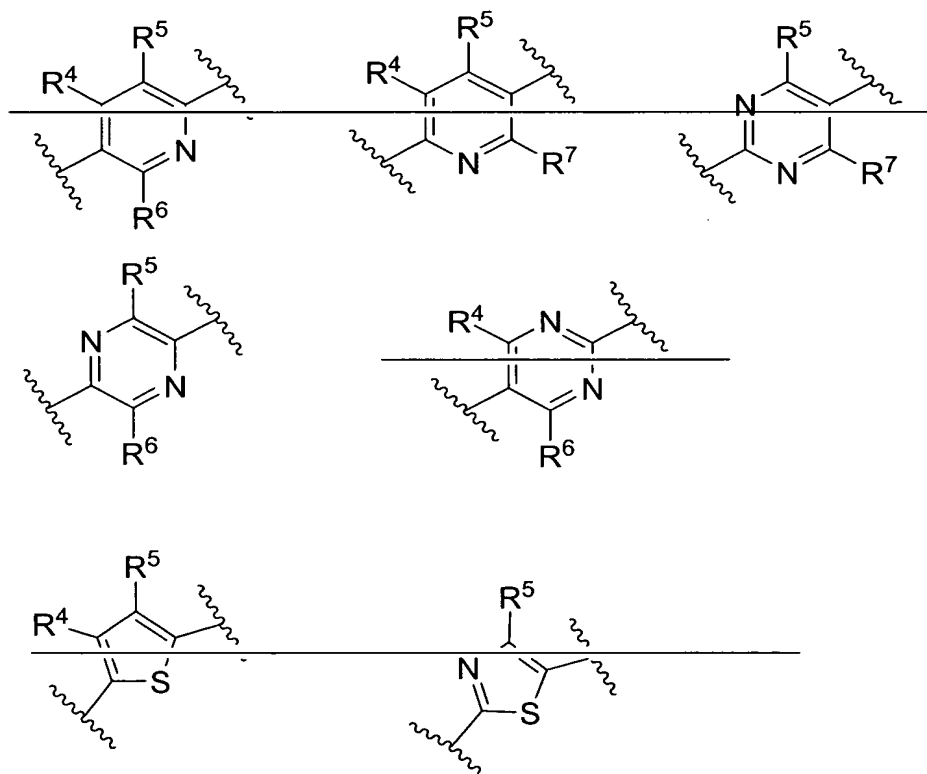
R<sup>11</sup> is H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, aryl, heteroaryl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)polyhaloalkyl, -SO<sub>2</sub>(aryl), -SO<sub>2</sub>(heteroaryl), -CO(C<sub>1</sub>-C<sub>6</sub>)alkyl, -CO(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -CO(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -C(O)aryl, -C(O)heteroaryl, -CONR<sup>13</sup>R<sup>14</sup> or -COOR<sup>12</sup>;

R<sup>12</sup> is (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkylaryl, -(C<sub>1</sub>-C<sub>6</sub>)alkylheteroaryl, aryl or heteroaryl;

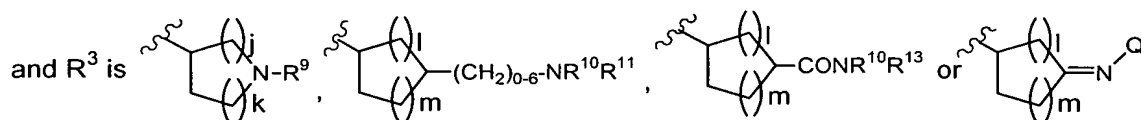
R<sup>13</sup> and R<sup>14</sup> may be the same or different and are independently H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkylaryl, aryl or heteroaryl; and,

$R^{15}$  is one or two substituents, which may be the same or different, and are independently H,  $-(C_1-C_6)alkyl$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_1-C_6)alkyl(C_3-C_7)cycloalkyl$ , aryl, heteroaryl,  $-CN$ ,  $-CONR^{13}R^{14}$ ,  $-COOR^{13}$ ,  $-OH$ ,  $-O(C_1-C_6)alkyl$ ,  $-O(C_3-C_7)cycloalkyl$ ,  $-O(C_1-C_6)alkyl(C_3-C_7)cycloalkyl$ ,  $-NR^{10}R^{11}$ ,  $-NR^{13}R^{14}$ , or a  $-(C_1-C_6)alkyl$  group substituted by an aryl, heteroaryl, hydroxy, alkoxy,  $-NR^{10}R^{11}$ ,  $-NR^{13}R^{14}$ ,  $-CONR^{13}R^{14}$ , or  $-COOR^{13}$  group, provided that a chemically stable compound results from substitution by  $R^{15}$ .

2. (currently amended) A compound as defined in Claim 1 wherein the heterocyclic group attached to Z is



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3. (currently amended) A compound as defined in Claim 2 wherein  $R^1$  is hydrogen,

$R^2$  is hydrogen or  $(C_1-C_6)$ alkyl,

**[[ $R^4$ ,]]  $R^5$ [[,]] and  $R^6$  ~~and  $R^7$~~**  are hydrogen or halogen,

$R^8$  is 1 to 3 substituents, which may be the same or different, and are independently selected from the group consisting of H, halogen,  $-O(C_1-C_6)$ alkyl, -OH, polyhaloalkyl and polyhaloalkoxy,

$R^9$  is  $-SO_2(C_1-C_6)$ alkyl,  $-SO_2(C_3-C_7)$ cycloalkyl,  $-SO_2(C_1-C_6)$ alkyl $(C_3-C_7)$ cycloalkyl,  $-SO_2$ aryl,  $-SO_2$ heteroaryl,  $-SO_2NR^{13}R^{14}$ ,  $-CO(C_1-C_6)$ alkyl,  $-CO(C_3-C_7)$ cycloalkyl,  $-CO(C_1-C_6)$ alkyl $(C_3-C_7)$ cycloalkyl,  $-C(O)$ aryl,  $-C(O)$ heteroaryl, aryl, heteroaryl,

$R^{10}$  is H or  $-(C_1-C_6)$ alkyl,

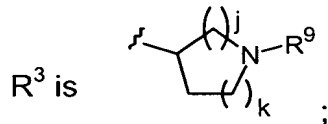
$R^{11}$  is  $-SO_2(C_1-C_6)$ alkyl, Q is  $-OR^{13}$  or  $-NR^{13}R^{14}$ ;

$R^{13}$  and  $R^{14}$  may be the same or different, and are independently H or  $-(C_1-C_6)$ alkyl;

the sum of j and k is 2 or 3; and,

the sum of l and m is 2 or 3.

4. (original) A compound as defined in Claim 3 wherein



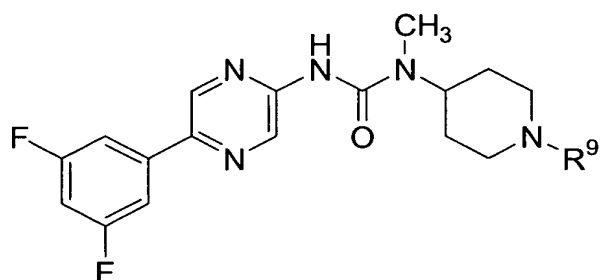
$R^9$  is  $-SO_2(C_1-C_6)$ alkyl,  $-SO_2(C_3-C_7)$ cycloalkyl,  $-SO_2$ aryl,  $-SO_2$ heteroaryl,  $-CO(C_1-C_6)$ alkyl,  $-CO(C_3-C_7)$ cycloalkyl,  $-CO(C_1-C_6)$ alkyl $(C_3-C_7)$ cycloalkyl,  $-C(O)$ aryl,  $-C(O)$ heteroaryl, aryl, or heteroaryl, and

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the sum of j and k is 2 or 3.

**Claims 5-11 (canceled)**

12. (currently amended) The compound as defined in Claim 1 of the formula

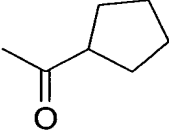
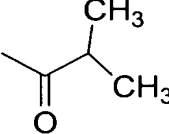
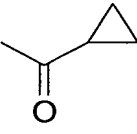
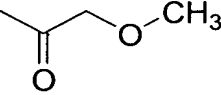
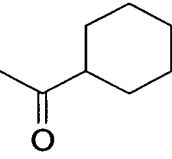
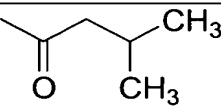
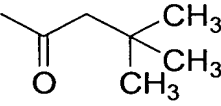
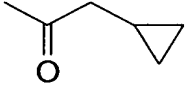


~~a prodrug thereof~~, or a pharmaceutically acceptable salt and/or hydrate of said compound ~~or of said prodrug~~, or where applicable, a geometric or optical isomer or racemic mixture thereof,

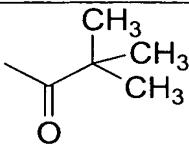
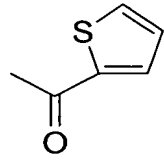
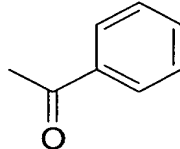
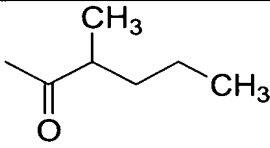
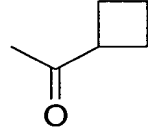
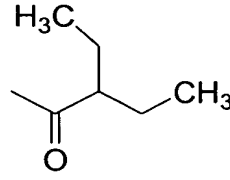
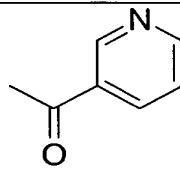
wherein R<sup>9</sup> is as shown in the table below:

	R <sup>9</sup>
0	
0A	
0B	

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	R <sup>9</sup>
0C	 <chem>CC(=O)C1CCCC1</chem>
0D	 <chem>CC(C)C(=O)C</chem>
0E	 <chem>CC(=O)C1CC1</chem>
0F	 <chem>CC(=O)CCOC</chem>
0G	 <chem>CC(=O)C1CCCCC1</chem>
0H	 <chem>CC(C)CC(=O)C</chem>
0I	 <chem>CC(C)(C)CC(=O)C</chem>
0J	 <chem>CC(=O)CC1CC1</chem>

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	R <sup>9</sup>
OK	
OL	
OM	
ON	
OO	
OP	
OQ	

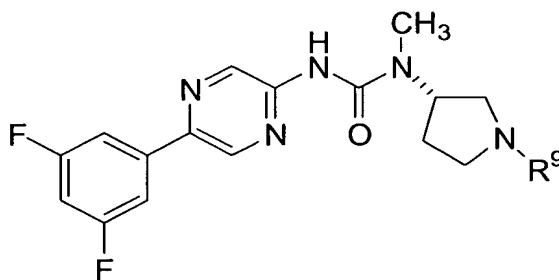
A1



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	$R^9$
OW	$-\text{SO}_2\text{CH}_3$

13. (currently amended) The compound as defined in Claim 1 of the formula

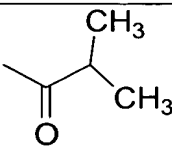


**a prodrug thereof**, or a pharmaceutically acceptable salt and/or hydrate of said compound ~~or of said prodrug~~, or where applicable, a geometric or optical isomer or racemic mixture thereof,

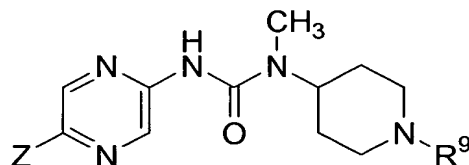
wherein  $R^9$  is as shown in the table below:

	$R^9$
OS	$-\text{SO}_2\text{CH}_3$
OT	
OU	

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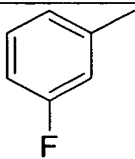
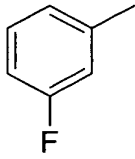
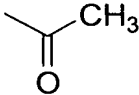
	R <sup>9</sup>
0V	

14. (currently amended) The compound as defined in Claim 1 of the formula

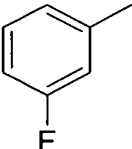
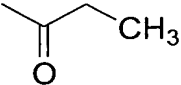
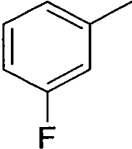
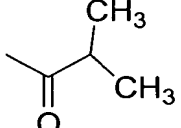
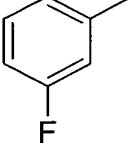
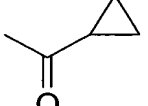
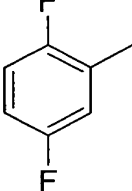
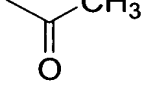
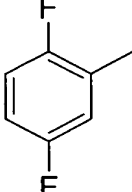
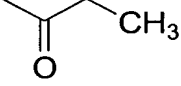
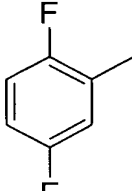
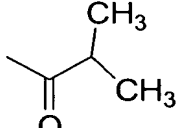


**a prodrug thereof**, or a pharmaceutically acceptable salt and/or hydrate of said compound ~~or of said prodrug~~, or where applicable, a geometric or optical isomer or racemic mixture thereof,

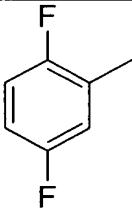
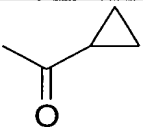
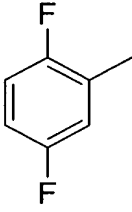
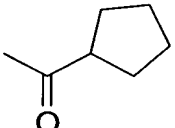
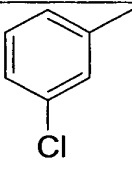
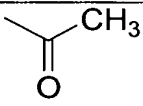
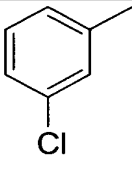
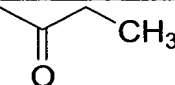
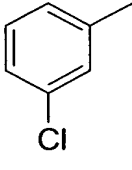
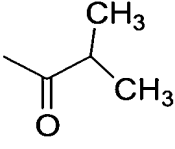
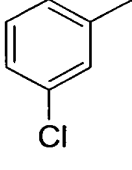
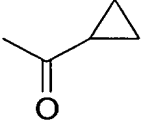
wherein Z and R<sup>9</sup> are as shown in the table below:

	Z	R <sup>9</sup>
0X		-SO <sub>2</sub> CH <sub>3</sub>
0Y		

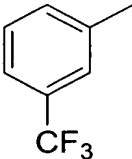
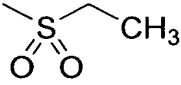
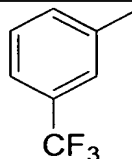
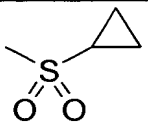
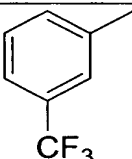
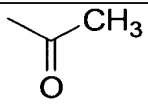
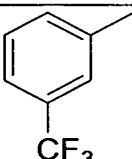
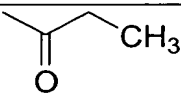
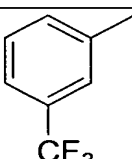
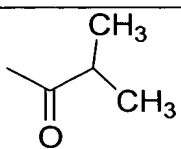
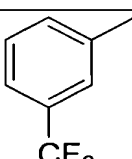
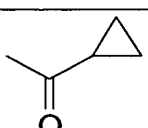
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	Z	R <sup>9</sup>
0Z		
0AA		
0BB		
0CC		
0DD		
0EE		

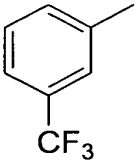
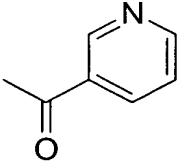
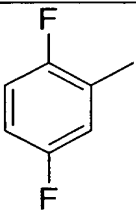
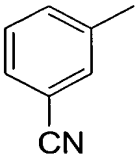
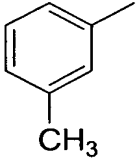
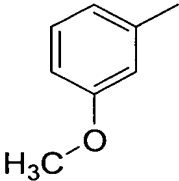
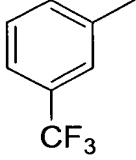
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	Z	R <sup>9</sup>
OFF		
OGG		
OHH		
OII		
OJJ		
OKK		

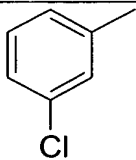
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	Z	R <sup>9</sup>
OLL		
OMM		
ONN		
OOO		
OPP		
OQQ		

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	Z	R <sup>9</sup>
0RR		
1		-SO <sub>2</sub> CH <sub>3</sub>
1A		-SO <sub>2</sub> CH <sub>3</sub>
1B		-SO <sub>2</sub> CH <sub>3</sub>
1C		-SO <sub>2</sub> CH <sub>3</sub>
1D		-SO <sub>2</sub> CH <sub>3</sub>

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	Z	R <sup>9</sup>
1E		-SO <sub>2</sub> CH <sub>3</sub>

**Claims 15-20 (canceled)**

21. (original) A pharmaceutical composition which comprises an effective amount of a compound as defined in Claim 1 and a pharmaceutically acceptable carrier therefor.

22. (currently amended) A method of treating eating and metabolic disorders comprising administering to a mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1 ~~or a prodrug thereof~~ or a pharmaceutically acceptable salt of said compound ~~or of said prodrug~~.

23. (original) The method of Claim 22 wherein said eating disorder is hyperphagia.

24. (original) The method of Claim 22 wherein said metabolic disorder is obesity.

25. (currently amended) A method of treating disorders associated with obesity comprising administering to a mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1 ~~or a prodrug thereof~~ or a pharmaceutically acceptable salt of said compound ~~or of said prodrug~~.

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26. (original) The method of Claim 25 wherein said disorders associated with obesity are type II diabetes, insulin resistance, hyperlipidemia and hypertension.

Al 27. (currently amended) A pharmaceutical composition which comprises a therapeutically effective amount of a composition comprising

a first compound, said first compound being a compound of claim 1, **a prodrug thereof**, or a pharmaceutically acceptable salt of said compound ~~or of said prodrug~~;

a second compound, said second compound being a  $\beta_3$  agonist, a thryomimetic agent, an eating behavior modifying agent or an NPY antagonist; and

a pharmaceutically acceptable carrier therefor.

28. (currently amended) A method of treating an eating disorder which comprises administering to a mammal in need of such treatment

an amount of a first compound, said first compound being a compound of claim 1, **a prodrug thereof**, or a pharmaceutically acceptable salt of said compound ~~or of said prodrug~~;

a second compound, said second compound being a  $\beta_3$  agonist, a thryomimetic agent, an eating behavior modifying agent or an NPY antagonist;

wherein the amounts of the first and second compounds result in a therapeutic effect.



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29. (currently amended) A pharmaceutical composition which comprises a therapeutically effective amount of a composition comprising

a first compound, said first compound being a compound of claim 1, **a prodrug thereof**, or a pharmaceutically acceptable salt of said compound ~~or of said prodrug~~;

A1  
a second compound, said second compound being an aldose reductase inhibitor, a glycogen phosphorylase inhibitor, a sorbitol dehydrogenase inhibitor, insulin, metformin, acarbose, a thiazolidinedione such as troglitazone or rezulin; a glitazone such as rosiglitazone or pioglitazone; a sulfonylurea, glipazide, glyburide, or chlorpropamide; and

a pharmaceutically acceptable carrier therefor.

**Claim 30 (canceled)**

31. (original) A process for making a pharmaceutical composition comprising combining a compound of Claim 1 and a pharmaceutically acceptable carrier.

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